### Profiling the Leading Causes of Death in the United States

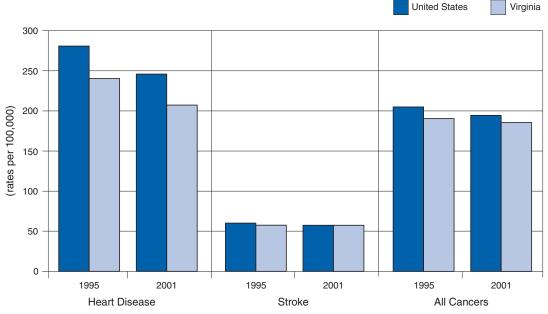
Heart Disease, Stroke, and Cancer



### **Chronic Diseases: The Leading Causes of Death**

#### The Leading Causes of Death

United States and Virginia, 1995 and 2001



#### Source: National Center for Health Statistics, 2003

#### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

### **Reducing the Burden of Chronic Disease**

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.



### The Leading Causes of Death and Their Risk Factors

Cancer

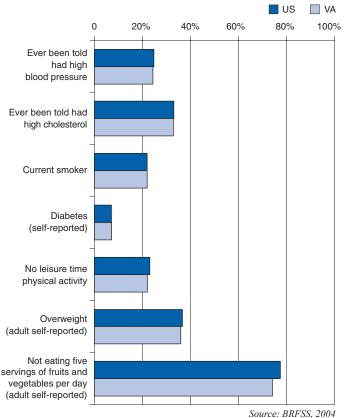
#### **Heart Disease and Stroke**

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Virginia, accounting for 14,913 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 4,129 deaths or approximately 7% of the state's deaths in 2001.

#### **Prevention Opportunities**

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

#### Risk Factors for Heart Disease and Stroke, 2003



Estimated Cancer Deaths, 2004

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over

560,000 Americans—or more than 1,500 people a day—will die

of cancer. Of these annual cancer deaths, 12,850 are expected

diagnosed nationally in 2004 alone. This figure includes 31,190

in Virginia. About 1.4 million new cases of cancer will be

new cases that are likely to be diagnosed in Virginia.

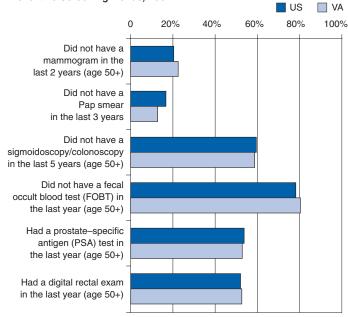
Source: American Cancer Society 2004

Cause of death	US	VA
All Cancers	563,700	12,850
Breast (female)	40,110	1,180
Colorectal	56,730	1,370
Lung and Bronchus	160,440	3,740
Prostate	29,900	660

#### **Prevention Opportunities**

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

#### Preventive Screening Trends, 2002



Source: BRFSS, 2003





## Virginia's Chronic Disease Program Accomplishments

## **Examples of Virginia's Prevention Successes**

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among Hispanic women (152.0 per 100,000 in 1990 versus 101.4 per 100,000 in 2000).
- A 12.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 34.9% in 1992 to 22.5% in 2002).
- A prevalence rate that was lower than the national corresponding rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (12.8% in Virginia versus 16.7% nationally).

# CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Virginia in the areas of cancer, heart disease, stroke, and related risk factors.

#### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Virginia, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS)  Virginia BRFSS	\$217,034
National Program of Cancer Registries  Virginia Cancer Registry	\$560,436
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program Healthy Pathways	\$1,200,000
Diabetes Control Program Virginia Diabetes Control and Prevention Program	\$350,000
National Breast and Cervical Cancer Early Detection Program Virginia Breast and Cervical Cancer Early Detection Program	\$2,345,015
National Comprehensive Cancer Control Program  Cancer Prevention and Control	\$290,000
WISEWOMAN	\$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program  Virginia Tobacco Prevention and Control Program	\$889,735
State Nutrition and Physical Activity/Obesity Prevention Program	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$5,852,220

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

#### **Additional Funding**

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Virginia that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.



### **Opportunities for Success**

## Chronic Disease Highlight: Cardiovascular Disease and Diabetes

In 2001, CDC mortality data indicated that Virginia had the nation's 27th highest heart disease death rate and the 11th highest stroke death rate. From 1996 to 2000, Virginia had a heart disease death rate of 520 per 100,000, slightly lower than the national rate of 536 per 100,000. However, from 1991 to 1998, the state had a stroke death rate that was higher than the national rate (137 per 100,000 compared with 121 per 100,000). Behavioral Risk Factor Surveillance System data from 2000 show that in Virginia, 50% of respondents who were told by a doctor that they had suffered a heart attack or myocardial infarction were under age 65, and 30% of respondents who were told by a doctor that they had suffered a stroke were under age 65. African Americans in Virginia under age 65 had the highest CVD death rate of all racial and ethnic groups.

Heart disease is the leading cause of diabetes-related deaths in Virginia. According to *Diabetes in Virginia 2000*, adults with diabetes have higher rates of heart disease and are more likely to suffer a stroke than adults without diabetes. According to Virginia hospitalization data from 1999, persons with diabetes are 8 times more likely to be hospitalized for a major cardiovascular disease than nondiabetics are. Diabetes mortality data from 1995 to 1999 show that more diabetes-related deaths were due directly to major cardiovascular diseases (1,757) than were due to diabetes.

The Virginia Department of Health began receiving funds from CDC in 1999 to support a state heart disease and stroke prevention program, entitled the Cardiovascular Health Project. The program has worked to establish a statewide coalition, "Healthy Pathways," that represents over 75 organizations from universities, businesses, nonprofit groups, and government. The coalition is writing a "Call to Action Plan" to accompany the State Cardiovascular Risk Reduction Plan, which will outline partnerships and resources that coalition members will commit to implement the plan. In addition, the project has promoted the development of a statewide network of faith initiative partners focused on increasing the cardiovascular health of African American church congregation members. Strategies emphasize supportive policies, physical and social environments, and education.

Text adapted from Chronic Disease Prevention and Control in Virginia:

Data Highlights (2003) and the Cardiovascular Health Project Web site:

www.vahealth.org/cvd.

#### **Disparities in Health**

African Americans comprise approximately 12% of the U.S. population and experience disproportionate health disparities. They tend to have higher rates of behavioral risk factors for chronic diseases as well as higher heart disease, stroke, and cancer mortality rates.

African Americans, who make up approximately 19.6% of Virginia's population, experience high rates of risk factors for heart disease and cancer, and consequently high heart disease and cancer death rates. Data from CDC's 2003 Behavioral Risk Factor Surveillance System (BRFSS) indicate that African Americans were less likely than whites to consume 5 or more servings of fruits and vegetables per day (22.8% versus 25.9%) and were less likely to participate in leisure time physical activity than whites (69.9% versus 79.4%). African Americans also were more likely to be obese than whites (34.1% versus 20.3%), more likely to have high blood pressure than whites (29.3% versus 23.8%), and more likely to report having been told that they had diabetes than whites (9.3% versus 6.8%).

Given the prevalence rates of the above risk factors for heart disease and stroke, it is not surprising that African Americans also have higher heart disease and stroke death rates than whites. From 1996 to 2000, African Americans in Virginia had a heart disease death rate of 639 per 100,000, compared with the heart disease death rate for whites, 504 per 100,000. From 1991 to 1998, African Americans in Virginia had a stroke death rate of 188 per 100,000, compared with 128 per 100,000 for whites.

#### **Other Disparities**

- **Breast Cancer Screening:** 2002 BRFSS data indicate that African American women in Virginia were more likely to report having had a mammogram in the last 2 years (86.7%) than Hispanic women (84.3%) or white women (79.9%).
- Cervical Cancer: Although 2002 BRFSS data indicate that African American women in Virginia (93.1%) were more likely to report having had a Pap smear in the last 3 years than white women (89.7%), from 1997 to 2001, African American women had a cervical cancer death rate that was more than twice as high as the rate for white women (5.1 per 100,000 versus 2.2 per 100,000).
- **Prostate Cancer:** African American men in Virginia in 2000 had a prostate cancer death rate that was more than 3 times as high as the rate for white men (81.9 per 100,000 compared to 26.7 per 100,000).

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